



# SGS Climate Change Solutions

Product carbon footprint to create  
a low carbon products market

SAFER  
GREENER  
SMARTER

SGS



Markets are becoming more and more sensitive to environmental claims. Today, it can seem like every organization is talking about 'net zero' and their 'route to net zero'. How do you meet your climate pledges while differentiating your product in competitive markets?

## Enhancing trust

The carbon footprint of your product and service is instrumental for assessing upstream and downstream greenhouse gas (GHG) emissions with a view to reducing them through cooperation with your suppliers. Understanding your product's carbon footprint provides the ideal product-level information for tracking and reducing scope 3 emissions.

Give your stakeholders confidence that your carbon emission claims are accurate and can be trusted with our GHG accounting and verification solutions. Product level information is complementary to organisational Scope 3 emissions and provides insights to track and reduce carbon at product level.

# Product footprint

The footprint of your product or service measures all GHG emissions released throughout its life cycle. It can be calculated using either a life cycle analysis (LCA) methodology, an internationally recognized standard, such as ISO 14067, or the GHG Protocol Product Lifecycle and Reporting Standard.

How you define the footprint boundaries of your product or service is dependent on your audience and available data. Choose 'gate to gate' to improve GHG emissions within your facilities, 'cradle to gate' to improve total GHG emissions resulting from the creation of your product or service, or 'cradle to grave' to cover the whole life cycle. Whichever level of coverage you choose, you will receive trusted, accurate data that empowers you to progress towards net zero products.

# Net zero



## UNDERSTAND YOUR EMISSIONS

Calculation of your GHG emissions should cover direct and indirect emissions, including value chain emissions both upstream and downstream. Value chain emissions are the hardest to tackle as they sit outside your direct control but, more often than not, represent your biggest impact. Scope 3 emissions' accounting is a journey that can start with approximations based on a robust methodology and consistent assumptions. SGS can help you with methodology and assumption to identify hotspots (Mapping) and design a purposeful data capture strategy. Delaying assessments of scope 3 emissions because data is not readily available will negatively affect your net zero ambition and blind investors.



## UNDERSTAND YOUR PORTFOLIO EMISSIONS

Further quantification and data quality improvement on Scope 3 emissions can also be achieved, especially for manufacturing companies, carrying out Product Carbon Footprints or Lifecycle Assessments (LCA). While the organizational Scope 3 footprint has a more holistic approach to upstream and downstream impacts, the product footprint identified hotspots of specific products and allows for comparison with similar products. Organizational Scope 3 footprint and product footprint are complementary and mutually beneficial in assessing risks and opportunities linked to decarbonization of supply chains.



## SET YOUR TARGETS

A robust baseline and a coherent carbon management and data collection system are the pre-requisite to set achievable and incremental reduction targets. The Net Zero Standard call for targets in line with science and sets near and long-term minimum ambition requirements. When setting targets, consider the feasibility of your decarbonization initiatives, place priority on those achievable in the near term.



## IMPLEMENT AND COMMUNICATE

There is no one size fits all when it comes to implementing decarbonization plans as each industry faces different challenges. Nonetheless, some key initiatives are common to all: demand-side measures include lowering the demand for primary resources by increasing circularity, increase energy efficiency, consider the use of renewable energy, replace feedstock or fuels with more sustainable options, reduce water consumption and waste. Verify and disclose your progress data with confidence.

## Gate to gate – business

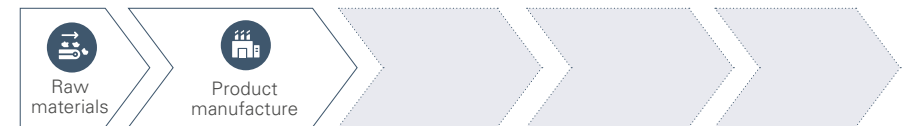
Measures only the GHG emissions associated with the processes involved in manufacturing the product.



## Cradle to gate – business to business

Gives you an accurate measurement of the inputs required to manufacture the product:

- Raw materials
- Product manufacture



## Cradle to grave – business to consumer

Calculates the complete footprint– the whole life cycle – providing you with accurate, trusted data to work in partnership to upstream and downstream stakeholders to reduce GHG emissions.

Includes the following inputs:

- Raw materials
- Product manufacture
- Distribution and retail
- Consumer use
- Disposal and recycling



# Product carbon footprint methodology

## Methodology

Prior to calculation, our experts collaborate with you to define:

- Goal and scope
- Functional/declared unit
- System boundaries
- Impact categories

Calculations are then conducted in accordance with the following requirements:

- ISO 14067
- ISO 14040
- ISO 14044
- Applicable product category rules (PCR)

## Data requirements

To ensure confidence in the calculation of your product's carbon footprint, the data should be:

- Collected over 12-month period
- Representative of technology
- Representative of geographical area
- Include all energy inputs – fuel, electricity, steam, compressed air
- Excluded material flows must be justified and not exceed 1% of mass or energy
- Excluded material flow total must not exceed 5%
- Validated for completeness and accurate through iron, carbon, and mass balance

# Benefits

We are SGS – the world’s leading testing, inspection and certification company.

Recognized as the global benchmark for quality and integrity, partnering with SGS for GHG accounting and verification services will enhance your ability to:

- Accurately monitor and improve GHG emissions
- Identify hotspots within your value chain
- Benchmark products
- Produce clear, trusted GHG product data for stakeholders
- Communicate your commitment to a net zero future
- Gain competitive advantage in the marketplace

## Additional services

We offer a range of complementary services to help you meet and demonstrate your commitment to reducing GHG emissions.

Solutions include:

- Corporate GHG emissions verification
- Methane solutions
- Benchmarking towards net zero
- Zero waste to landfill verification
- Energy audits
- EDGE, an IFC Green Building Scheme

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